



MEDICAL TREATMENT OF SUPERFICIAL THROMBOPHLEBITIS OF THE LOWER LIMB: HEPARIN OR ANTI-INFLAMMATORY?

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Objective:

Review the available evidence about the best treatment of superficial thrombophlebitis (ST) of the lower limb (LL), regarding nonsteroidal anti-inflammatory drugs (NSAIDs) and low-molecular-weight heparin (LMWH).

Review methods:

Research of clinical guidelines (CG), computer decision support systems (CS), systematic reviews (SR) and original studies (January 2008 to May 2011). MeSH terms: venous thrombosis; heparin, low-molecular-weight; anti-inflammatory agents. American Family Physician’s Strength

of Recommendation Taxonomy (SORT) was used to assess the level of evidence. **Data sources:** Pubmed database, evidence-based medicine websites, General Directorate of Health, Portuguese Association of General Practitioners, MGFamiliar.net, Index of Portuguese Medical Magazines.

Results:

215 records identified through database searching

- Population:** Patients with a diagnosis of ST of LL.
- Intervention:** LMWH and/or NSAIDs.
- Comparison:** Other therapies.
- Outcomes:** Pain relief; prevention of complications.

Exclusion criteria:
Repeated articles; deep venous thrombosis isolated; hospital context; ST not in LL; paediatric; pregnancy; ST complicated or associated with pathological conditions that increase the risk; prophylaxis of TS.

4 articles selected

Label:
* Unfractionated Heparin
** Vitamin K Antagonist
*** Deep Vein Thrombosis
**** Randomized Clinical Trial

	Authors	Recommendations	SOR
CG	American College of Chest Physicians ¹	1st line: Prophylactic/intermediate doses of LMWH or intermediate doses of UFH* for at least 4 weeks.	B
		Alternative: 4 weeks of VKA** (target INR, 2.0 to 3.0) + UFH and LMWH in the first 5 days .	C
		NSAIDs + anticoagulation should not be used.	B
		The authors suggest the use of oral or topical NSAIDs in less extensive ST. (without recommendation)	-
CS	Fernandez L, <i>et al.</i> ²	Low risk for DVT***: Oral NSAIDs	B
		High risk for DVT: Anticoagulation for 4 weeks [LMWH, UFH, VKA, equally effective]	B

	Authors	Population	Intervention	Conclusion	Level of evidence
SR	Di Nisio M, <i>et al.</i> ³ 24 RCT ****	n=2469 ST	LMWH, UFH, VKA, NSAIDs Topical treatment Surgery	1st line: LMWH or NSAIDs Authors remark: Intermediate dose of LMWH for 4 weeks	2
RCT	Uncu H ⁴	n=50 ST of greater saphenous vein	25 patients: Nadroparin (190 IU/Kg, once daily) 25 patients: Nadroparin (190 IU/Kg, once daily) + Acemetacine (60 mg, twice daily)	More effective: Combined therapy of LMWH and anti-inflammatory	2

Conclusions:

- LMWH and NSAIDs are two first-line treatment options (SOR B).
- When associated with risk factors for complications, the use of intermediate/therapeutic doses of LMWH for at least 4 weeks is a first-line treatment option (SOR B).
- More RCT are needed, particularly regardind the choice between LMWH or NSAIDs or its’ simultaneous use, doses and treatment’s length.

References: 1 Kearon C, Kahn SR, Agnelli G, Goldhaber S, Raskob GE, Comerota AJ. Antithrombotic therapy for venous thromboembolic disease: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). Chest 2008 Jun;133(6 Suppl):454S-545S; 2 Fernandez L, Scovell S. Superficial thrombophlebitis of the lower extremity. In: UpToDate, Basow, DS (Ed), UpToDate, Waltham, MA, 2011; 3 Di Nisio M, Wickers IM, Middeldorp S. Treatment for superficial thrombophlebitis of the leg. *Cochrane Database of Systematic Reviews* 2007, Issue 2. Art. No.: CD004982. DOI: 10.1002/14651858.CD004982.pub3 (version 3 published online in Issue 12, 2010); 4 Uncu H. A comparison of low-molecular-weight heparin and combined therapy of low-molecular-weight heparin with an anti-inflammatory agent in the treatment of superficial vein thrombosis. *Phlebology*. 2009 Apr;24(2):56-60.